DEPARTMENT OF ENVIRONMENTAL QUALITY
Environmental Assessment

(Water Protection Bureau)

Name of Project: Plum Creek Manufacturing Inc, Columbia Falls Operations

Type of Project: Discharge industrial strength wastewater to a subsurface drainfield under the Montana Ground Water Pollution Control System permit program

Location of Project: Outfalls 003A, 004A, 005A and 006A are located in Section 8 of Township 30 North Range 20 West at 48°22'34.5'' North latitude (48.37625) and 114°11'57.7'' West longitude (–114.19936) in Flathead County.

City/Town: Columbia Falls **County:** Flathead

Description of Project: This is a renewal permit for multiple subsurface wastewater disposal systems servicing the existing Plum Creek timber products processing facility located in Columbia Falls, MT. The proposed permit authorizes discharge of industrial wastewater to four (4) outfalls, which will then discharge to ground water. The discharge points are identified as Outfall 003a, 004a, 005a and 006A. Plum Creek Manufacturing (PCM), a timber products processing facility manufactures plywood, MDF and finished wood products. The facility operates various wood manufacturing processes including sawmills, plywood and MDF manufacturing, truck/equipment repair shops and boilers. Processed wastewater, noncontact-cooling water, boiler blow down, water softener backwash, facility wash down and storm water runoff water are discharged from various sites throughout this facility and discharged to state waters through a combination of infiltration ditches and storage and treatment ponds. Discharges from the PCM facility are considered continuous with contributory flows varying widely due to the level of plant production, storm event frequency and the number of personnel on site. EPA General Form 1 A indicates SIC codes of 2493 (Reconstituted Wood products), 2436 (Softwood Veneer and Plywood) and 2421 (Sawmill and Planning Mills) as the primary processes at the PCM facility. All discharges from the PCM facility discharge to Class I ground waters.

Agency Action and Applicable Regulations: The proposed action is to issue an individual MGWPCS discharge permit to a industrial wastewater treatment operation and specify effluent limitations, monitoring and discharge reporting requirements.

Summary of Issues: The purpose of this action is to regulate the discharges of pollutants to state waters from the facility. Issuance of an individual permit will require the facility to implement design and management practices to prevent pollution and degradation of groundwater. The action will have benefits to water quality.

Affected Environment & Impacts of the Proposed Project:

Y = Impacts may occur (explain under Potential Impacts). *Include frequency, duration (long or short term), magnitude, and context for any significant impacts identified. Reference other permit analyses when appropriate (ex: statement of basis). Address significant impacts related to substantive issues and concerns. Identify reasonable feasible mitigation measures (before and after) where significant impacts cannot be avoided and note any irreversible or irretrievable impacts. Include background information on affected environment if necessary to discussion.*

N = Not present or No Impact will likely occur. *Use negative declarations where appropriate (wetlands, T&E, Cultural Resources).*

IMPACTS ON THE PHYSICAL ENVIRONMENT	
RESOURCE	[Y/N] POTENTIAL IMPACTS AND MITIGATION MEASURES
1. GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE: Are soils present which are fragile, erosive, susceptible to compaction, or unstable? Are there unusual or unstable geologic features? Are there special reclamation considerations?	**[N]** Discharge will increase moisture in the vadose zone. There are no limiting layers present in the soil profile that would impede continued treatment of effluent discharged from any outfall. Well logs did not indicate any geologic features that were susceptible to degradation.
2. WATER QUALITY, QUANTITY AND DISTRIBUTION: Are important surface or groundwater resources present? Is there potential for violation of ambient water quality standards, drinking water maximum contaminant levels, or degradation of water quality?	**[N]** The Department has authorized a standard 500-foot mixing zone above Class I ground water. The department defines a mixing zone as a limited portion of the aquifer, where initial dilution if a discharge takes place and where water quality changes may occur and where certain water quality standards may be exceeded.
3. AIR QUALITY: Will pollutants or particulate be produced? Is the project influenced by air quality regulations or zones (Class I airshed)?	**[N]** No significant impacts have been determined. Some dust may result during installation of monitoring wells, flow monitoring equipment or additional wastewater treatment equipment. The Permittee has a Air Quality Operating Permit (permit number OP 2667-02) which is effective August 23, 2005 and expires August 23, 2010.
4. VEGETATION COVER, QUANTITY AND QUALITY: Will vegetative communities be significantly impacted? Are any rare plants or cover types present?	**[N]** No significant impacts have been identified.
5. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS: Is there substantial use of the area by important wildlife, birds or fish?	**[N]** No significant impacts have been identified. No terrestrial of avian life or habitat are expected to be impacted. No aquatic life or habitat is expected to be impacted as the closest surface water Garnier Creek (approximately 4,000 ft) and the Flathead River approximately (8,000 ft) are some distance away.

IMPACTS ON THE PHYSICAL ENVIRONMENT	
6. UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES: Are any federally listed threatened or endangered species or identified habitat present? Any wetlands? Species of special concern?	**[N]** No significant impacts have been identified from the EA, however the Montana National Heritage Program identified the following species of concern are present in the area of the discharge: Salvelinus confluentus, Oncorhynchus clarkii lewisi, Canis lupus, Cirsium brevistylum, Alonia brevirostris, Asplenium trichomanes, lathyrus bijugatus, Silene spaldingii, Cyperus erythrorizos, Amblyodon dealbatus, Castilleja cervina, Bryum calobryoides, Eriophorum gracile and Cypripedium parviflorum.
7. HISTORICAL AND ARCHAEOLOGICAL SITES: Are any historical, archaeological or paleontological resources present?	**[N]** No significant impacts have been identified from the EA. The Montana State Historic Preservation Office reported that according to their records there have been no previously recorded sites in the immediate area. The Historic Preservation Office recommended that a cultural resource inventory is unwarranted at this time.
8. AESTHETICS: Is the project on a prominent topographic feature? Will it be visible from populated or scenic areas? Will there be excessive noise or light?	**[N]** No significant impacts have been identified. All outfalls are existing, and there are no proposed outfalls that are aesthetically unappealing.
9. DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AIR OR ENERGY: Will the project use resources that are limited in the area? Are there other activities nearby that will affect the project? Will new or upgraded powerline or other energy source be needed)	**[N]** No significant impacts have been identified from the EA. Estimated hydraulic conductivity values (estimated from hydrogeologic materials in aquifer) indicate a generally high rate of groundwater movement. Ground water levels range from approximately 10-25 feet below the surface. Potential for ground water depletion is minimal.
10. IMPACTS ON OTHER ENVIRONMENTAL RESOURCES: Are there other activities nearby that will affect the project?	**[N]** No significant impacts have been identified from the EA. The new permit is protective of state ground waters.

IMPACTS ON THE HUMAN ENVIRONMENT	
11. HUMAN HEALTH AND SAFETY: Will this project add to health and safety risks in the area?	**[N]** No significant impacts have been identified. The wastewater treatment ponds are fenced, and should pose no threat to human health.
12. INDUSTRIAL, COMMERCIAL AND AGRICULTURAL ACTIVITIES AND PRODUCTION: Will the project add to or alter these activities?	**[N]** No significant impacts have been identified.
13. QUANTITY AND DISTRIBUTION OF EMPLOYMENT: Will the project create,	**[N]** No significant impacts have been identified. As this is a existing system, there is little potential for creation of

IMPACTS ON THE HUMAN ENVIRONMENT	
move or eliminate jobs? If so, estimated number.	new jobs.
14. LOCAL AND STATE TAX BASE AND TAX REVENUES: Will the project create or eliminate tax revenue?	**[N]** This is a existing facility, as such the tax base is likely to remain the same.
15. DEMAND FOR GOVERNMENT SERVICES: Will substantial traffic be added to existing roads? Will other services (fire protection, police, schools, etc.) be needed?	**[N]** No significant impacts have been identified from the EA.
16. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS: Are there State, County, City, USFS, BLM, Tribal, etc. zoning or management plans in effect?	**[N]** No significant impacts have been identified from the EA. No local environmental plans were identified by the Department.
17. ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES: Are wilderness or recreational areas nearby or accessed through this tract? Is there recreational potential within the tract?	**[N]** No significant impacts have been identified from the EA.
18. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING: Will the project add to the population and require additional housing?	**[N]** No significant impacts have been identified from the EA. No population growth is expected as a result of the issuance of this permit.
19. SOCIAL STRUCTURES AND MORES: Is some disruption of native or traditional lifestyles or communities possible?	**[N]** No significant impacts have been identified from the EA. The Montana State Historic Preservation Office reported that there have been no previously recorded sites in the immediate area.
20. CULTURAL UNIQUENESS AND DIVERSITY: Will the action cause a shift in some unique quality of the area?	**[N]** No significant impacts have been identified from the EA. The Montana State Historic Preservation Office reported that there have been no previously recorded sites in the immediate area.
21. OTHER APPROPRIATE SOCIAL AND ECONOMIC CIRCUMSTANCES:	**[N]** No significant impacts have been identified from the EA
22(a). PRIVATE PROPERTY IMPACTS: Are we regulating the use of private property under a regulatory statute adopted pursuant to the police power of the state? (Property management, grants of financial assistance, and the exercise of the power of eminent domain are not within this category.) If not, no further analysis is required.	**[N]** No significant impacts have been identified from the EA
22(b). PRIVATE PROPERTY IMPACTS: Is the agency proposing to deny the application or condition the approval in a way that	**[N]** No significant impacts have been identified from the EA

IMPACTS ON THE HUMAN ENVIRONMENT	
restricts the use of the regulated person's private property? If not, no further analysis is required.	
22(c). PRIVATE PROPERTY IMPACTS: If the answer to 21(b) is affirmative, does the agency have legal discretion to impose or not impose the proposed restriction or discretion as to how the restriction will be imposed? If not, no further analysis is required. If so, the agency must determine if there are alternatives that would reduce, minimize or eliminate the restriction on the use of private property, and analyze such alternatives. The agency must disclose the potential costs of identified restrictions.	**[N]** No significant impacts have been identified from the EA

23. **Description of and Impacts of other Alternatives Considered:**

A. No Action: Under the 'No Action' alternative the Department would not issue an individual ground water discharge permit under the Montana Ground Water Pollution Control System administrative rules. The proposed action will have environmental benefits compared to leaving the facility unpermitted.
B. Approval with modification: The Department has not identified any necessary modifications to grant approval.

24. **Summary of Magnitude and Significance of Potential Impacts:**
Impacts were assessed with the assumption that the facility will comply with the terms and conditions of the permit. Violations of the permit could lead to significant adverse impacts to state waters. Violations of the permit are not an effect of the agency action, because the permit itself forbids such activities. However, the Department has taken steps to ensure that violations do not occur. The terms of the permit have been clarified and modified in response to comments from regulated parties, the public and other agencies. The Department provides assistance to applicants in understanding and implementing the requirements of the permit. The Department also conducts periodic inspections of permitted facilities, and identifies potential problems with design or management practices. If violations of the permit do occur, the Department will take appropriate action under the water quality act. Section 75-5-617, MCA. Enforcement sanctions for violations of the permit include injunctions, civil and administrative penalties, and cleanup orders.

25. **Cumulative Effects:** The issuance of this MGWPCS discharge permit would not have cumulative effects because the permit prohibits pollution and degradation of state waters.

26. **Preferred Action Alternative and Rationale**: The preferred action is to authorize Plum Creek Manufacturing, Columbia Falls Operations to discharge wastewater to ground water under an individual MGWPCS Discharge Permit. This action is preferred because the permit program provides a regulatory mechanism for protecting and improving water

quality by applying control technology to the source discharge of domestic and industrial wastes treated at the facility.

Recommendation for Further Environmental Analysis:

[ ] EIS [ ] More Detailed EA [**X**] No Further Analysis

Rationale for Recommendation:

27. Public Involvement: This draft EA will be posted on the Department web page: http://www.deq.state.mt.us/ea.asp. For copies of the draft EA or to submit comments, write or call the Montana Department of Environmental Quality c/o Dianne McKittrick, P.O. Box 200901, Helena MT 59620-0901, telephone (406) 444-3080. Comments will be received for 30-days after the date of the signature below.

The Department maintains a list of persons who have expressed an interest in all environmental water quality related issues. The Department will send a copy of this document to all persons who have submitted their name, address, and telephone number to the Department for the purpose of being included on the water quality interested parties' mailing list.

28. Persons and agencies consulted in the preparation of this analysis:
Damon Murdo, Cultural Records Manager, Historical Preservation Society
Montana Bureau of Mines and Geology Web site
Montana Fish and Wildlife Web page, animal species information
Natural Resource Information System, Montana State Library

EA Checklist Prepared By: Louis Volpe

Louis Volpe	November 28, 2007
(Name)	Date

EA Revisions and Corrections: As a result of comments received during the 30-day public comment period

(Name)	Date

Approved By:

Bonnie Lovelace, Chief,
Water Protection Bureau

Signature	Date